NEA RESEARCH BULLETIN

VOLUME 39, NUMBER 3 • OCTOBER 1961

- Population Changes
- New College Teachers
- School Salaries
- State Sick Leave Laws
- College Education Costs

PUBLISHED BY THE
RESEARCH DIVISION • NATIONAL EDUCATION ASSOCIATION

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NEA Research Bulletin is published four times each year, in February, May, October, and December, by the Research Division of the National Education Association. Second-class postage paid at Washington, D. C.

Send notice of undeliverable copies on Form 3579 to the National Education Association, 1201 Sixteenth Street, Northwest, Washington 6, D. C.

Subscription price, $2 a year. Copies of this issue may be obtained at the following prices: single copy, 60¢; 2-9 copies, 10% discount; 10 or more copies, 20% discount. Address request to the Publications-Sales Section of the National Education Association, 1201 Sixteenth Street, Northwest, Washington 6, D. C.

Executive and editorial office: Research Division, National Education Association, 1201 Sixteenth Street, Northwest, Washington 6, D. C.

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EDUCATIONAL PRESS ASSOCIATION OF AMERICA

Reduced Progress in Urban Teachers' Salaries

SALARIES OF URBAN TEACHERS advanced at a lower rate in the past two years than in the preceding two years. Urban salaries advanced in the past two years at a lower rate than those of rural teachers. Thus the salary position of urban teachers, as compared with other teachers, is less favorable than it was two years ago.

The 1960-61 salary survey of urban school districts is the twentieth biennial study of this type made by the NEA Research Division. Among the findings are these points:

- The average salary of urban classroom teachers in 1960-61 was $5719, the median salary was $5510.
- Nearly a third of the urban teachers were paid within the range from $4500 to $5500. Two percent were paid less than $3500, and 4 percent were paid as much as $8500.
- Teachers with six or more years of college preparation received salaries averaging from 30 to 50 percent more than those with four but less than five years of preparation.
- The average salary of urban classroom teachers increased only 7.6 percent in the two years from 1958-59 to 1960-61, as compared with 10.6 percent in the two years preceding.
- The urban increase of 7.6 percent in two years was less than the estimated increase of 9.2 percent from 1958-59 to 1960-61 in salaries of all classroom teachers in rural and urban schools combined.
- Teachers in the largest urban districts received average salaries in 1960-61 about 15 percent above the average for all urban teachers. Twenty years ago this difference was 44 percent.
- The decade since 1950-51 has shown greater salary increases for principals and superintendents than for classroom teachers; this reverses the trend shown in the decade beginning with 1940-41.

Distribution of Salaries

Salaries of classroom teachers in urban school systems follow the familiar normal curve of distribution, skewed somewhat to the right. The teachers who received salaries of $8500 in 1960-61 slightly outnumbered those who received less than $3500. Although the largest, or modal group, comprised those paid from $4500 to $5499, the median of $5510 and the mean of $5719 were both in the next higher salary interval.

The 1960-61 survey collected data on the salaries of 583,926 classroom teachers, from which projections were made to provide the estimates shown in Figure 1 for all urban teachers. Questionnaires were sent to all districts in the first three population groups, as listed in Table 1, and to a 1-in-4 sample in Groups IV, V, and VI. Replies were received from three-fourths of the districts approached.

Higher Salaries for Higher Preparation

The school districts were asked to report salaries separately, where possible, for teachers having the various levels of preparation commonly recognized as the basis for separate classes in

1—SALARY RELATIONSHIPS BY LEVEL OF PREPARATION, 1960-61

School district groups, by population	Index of relationship, with salary for teachers with four years of preparation as 100.0		
	Four years, but less than five	Five years, but less than six	Six years or more
I. 500,000 and over	100.0	112.1	137.5
II. 100,000–499,999	100.0	121.7	150.2
III. 30,000–99,999	100.0	122.2	143.7
IV. 10,000–29,999	100.0	120.6	134.7
V. 5,000–9,999	100.0	116.8	131.3
VI. 2,500–4,999	100.0	112.7	129.7

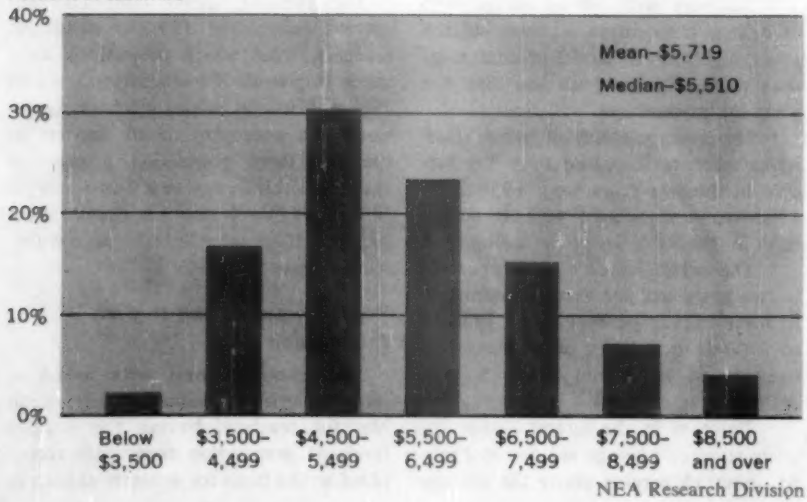
teachers' salary schedules. About four-fifths of the districts reporting provided this information. As Table 1 shows, the least recognition for advanced preparation was given by the largest and smallest school districts.

Highest recognition for the fifth year or master's degree was shown in the districts of Group III, 30,000 to 99,999 in population, where the average salary for teachers with five years of preparation was 22 percent higher than the average for those with four years of preparation. One-third of the urban teachers covered by the survey had completed at least five years of preparation. Teachers with six or more years of preparation received an average salary 50 percent higher than the average for those with four years, in the school districts of Group II, with populations of 100,000-499,999 persons.

Higher Salaries in Larger Districts

In the largest urban school districts reporting, the average salary of teachers in 1960-61 was $6572, as compared with only $4813 in districts of fewer than 5000 persons. Table 2 shows the

SALARIES PAID TEACHERS IN URBAN SCHOOLS IN 1960-61



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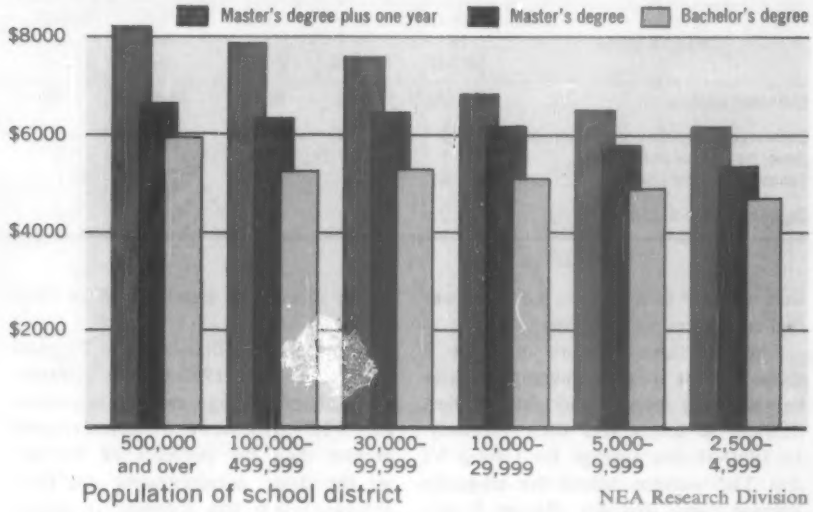
AVERAGE SALARIES OF CLASSROOM TEACHERS VARY WITH LEVEL OF PREPARATION AND SIZE OF SCHOOL DISTRICT



range of averages, also the percents of increase by population group in the two most recent biennial surveys. Because the districts are grouped by population, and shifts were made in the grouping before both the 1958-59 and the 1960-61 studies, the averages for 1956-57, 1958-59, and 1960-61 were not exactly comparable. It seems from the figures shown that all groups except Group I, the largest districts, showed less increase in the two years leading up to 1960-61 than in the two years leading up to 1958-59. The average increase for all groups was 7.6 percent in the most recent biennium as compared with 10.6 in the preceding biennium.

For the latest two years, from 1958-59 to 1960-61, Groups II through V were similar, in percents of increase

2—AVERAGE SALARIES OF CLASSROOM TEACHERS

School district groups, by population	Average salary, 1960–61	Percent of Increase		Index of relationship with average for all groups as 100.0		
		1956–57 to 1958–59	1958–59 to 1960–61	1940–41	1950–51	1960–61
I. 500,000 and over	$6,572	1.9%	10.1%	144.2	124.6	114.9
II. 100,000–499,999	5,695	11.9	8.3	105.9	103.4	99.6
III. 30,000–99,999	5,710	11.3	7.7	93.1	99.6	99.8
IV. 10,000–29,999	5,496	11.1	8.7	82.5	93.0	96.1
V. 5,000–9,999	5,127	10.3	7.8	75.0	87.6	89.6
VI. 2,500–4,999	4,813	11.4	4.3	67.5	83.3	84.2
All urban school districts	$5,719	10.6%	7.6%	100.0	100.0	100.0

3—TRENDS IN PERCENTS OF INCREASE IN AVERAGE SALARIES IN URBAN SCHOOL DISTRICTS

Personnel groups	1940-41 to 1960-61	1940-41 to 1950-51	1950-51 to 1960-61	1956-57 to 1958-59	1958-59 to 1960-61
Classroom teachers	191.5%	76.6%	65.1%	10.6%	7.6%
Supervising elementary-school principals	179.3	63.8	70.5	11.9	8.9
Junior high-school principals	185.3	60.9	77.3	13.0	9.0
Senior high-school principals	183.6	59.8	77.5	12.8	10.7
Superintendents of schools	185.0	62.3	75.6	11.5	9.2

that rounded to 8 percent. Group I was higher; Group VI was lower.

The last three columns in Table 2 show that the spread in average salaries between the largest and the smallest districts is much less than formerly. In 1950-51 the average for Group VI was 32.5 percent below the all-group average, and that for Group I was 44.2 percent above it. In 1960-61 the range was only from 15.8 percent below to 14.9 percent above.

Increases for Certain Groups

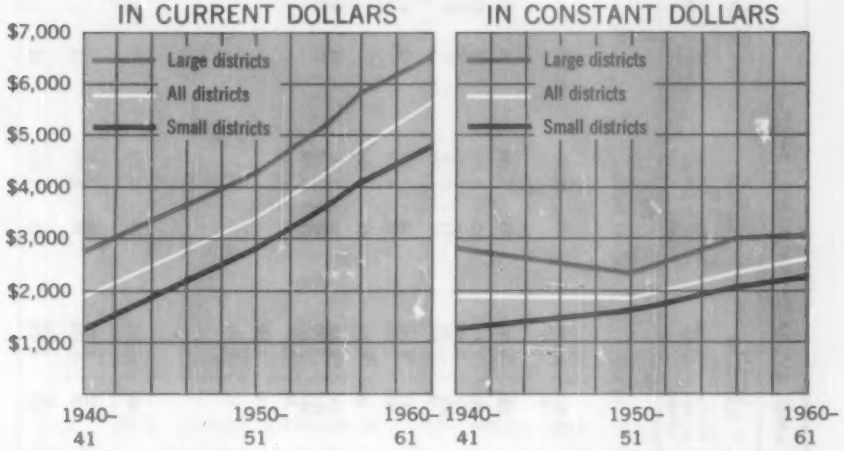
Classroom teachers, principals, and superintendents of schools present a sequence of positions found in practically all local school systems. Tables 3 and 4 give figures on percents of increase in average salaries paid in these positions.

Table 3 shows that over the 20 years from 1940-41 to 1960-61, the increases in teachers' average salaries amounted to 191.5 percent and were slightly greater than the percents of increase in the four administrative positions shown. When the increase is shown separately for each of the two decades covered, it is seen that teachers made a relatively greater gain in the decade ending in 1950-51 but administrators made a relatively greater gain in the decade ending in 1960-61. Also, for each of the studies covering the past four years, the percents of increase were higher for the administrative than for the classroom teaching positions.

4—TEN-YEAR INCREASE IN AVERAGE SALARIES, CERTAIN POSITIONS IN URBAN SCHOOL DISTRICTS

School district groups, by population	Percent of increase in average salaries, 1950-51 to 1960-61				
	Classroom teachers	School principals			Superintendents of schools
		Elementary (supervising)	Junior high	Senior high	
I. 500,000 and over	52.3%	67.1%	46.2%	44.9%	37.0%
II. 100,000-499,999	59.0	68.4	64.0	64.3	56.7
III. 30,000-99,999	65.5	78.2	73.3	67.1	60.7
IV. 10,000-29,999	70.6	76.9	84.1	72.3	61.2
V. 5,000-9,999	69.0	71.3	81.2	69.8	59.1
VI. 2,500-4,999	66.5	60.8	62.6	61.7	53.9
Weighted average, all districts	65.1%	70.5%	77.3%	77.5%	75.6%

TRENDS IN AVERAGE SALARIES OF URBAN TEACHERS, 1940-41 TO 1960-61



Large districts: 500,000 and over in population. Small districts: 2,500 to 4,999 in population. Figures in constant dollars deflated by Consumer Price Index, Bureau of Labor Statistics, 1947–49 = 100.0.

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Table 4 presents what appears to be a paradox. In each of the six separate population groups the increases for superintendents are substantially lower than the increases for classroom teachers, but the weighted average for all districts shows a greater increase for superintendents than for teachers. The shift in relative weights over the 10-year period results in the higher increase when all groups are combined than when each group is shown separately.

Effect of Price Increases

It should be remembered that the increases which appear to have almost tripled urban salaries in the past 20 years have been accompanied by major changes in the cost of living and purchasing power of the dollar, and in wage-and-salary levels reported for all workers.

Prices increased 109 percent from 1940-41 to 1960-61. Salaries that had not more than doubled from 1940-41 to 1960-61 thus had lost purchasing power. Large districts lagged behind small districts in rate of increase in classroom teachers' salaries to such an extent that the average salary in the Group I districts was actually worth less in 1950-51 than in 1940-41.

The 1960-61 average salary for the Group I districts was only 11 percent higher in purchasing power than the average of 10 years earlier, as compared with an increase of about 40 percent for all urban teachers. During these 10 years the average earnings of wage-and-salary workers in the United States rose a little more than one-fourth in purchasing power. Although teachers as a group advanced in salary somewhat more rapidly than all employed persons during these years, the teachers in the largest urban centers did not share fully in this advance.

A Diversity of Positions

The questionnaire sent to superintendents of schools to collect the data for the Research Division's biennial salary survey is a complex instrument, covering more than 50 different personnel groups. Extensive labor in many school offices is required to provide the details requested. Table 5 lists the

5—PROFESSIONAL STAFF OF URBAN SCHOOL DISTRICTS: NUMBERS AND AVERAGE SALARIES, 1960-61

Position	Group I 500,000 and over		Group II 100,000–499,999		Group III 30,000–99,999		Group IV 10,000–29,999		Group V 5,000–9,999		Group VI 2,500–4,999	
	Number of individuals	Average salary	Number of individuals	Average salary	Number of individuals	Average salary	Number of individuals	Average salary	Number of individuals	Average salary	Number of individuals	Average salary
Number of districts reporting	23		144		510		370		233		79	
Percent of total number of districts	100.0%		89.2%		80.8%		19.6%*		14.0%*		8.7%*	
STAFFS OF INDIVIDUAL SCHOOLS:												
Classroom teachers:												
Elementary and secondary schools	152,552	$6,572	181,145	$5,695	179,985	$5,707	47,825	$5,496	14,129	$5,127	2,828	$4,813
Junior college	1,681	8,191	1,983	7,367	1,111	7,065	89	6,138	.....	.....	.....	.....
Part-time or continuation schools or adult education	192	6,583	122	5,189	116	6,345	.....	.....	.....	.....	.....	.....
Counselors (teach less than half time)	1,245	7,317	2,333	7,268	2,151	7,158	506	6,768	105	6,240	16	5,500
Elementary-school administrators:												
Supervising principals	3,304	10,608	4,789	8,480	5,032	8,333	1,178	7,744	309	7,150	50	6,460
Teaching principals	49	6,893	266	5,782	569	6,342	407	5,967	174	5,845	42	5,643
Total	3,353	10,554	5,055	8,338	5,601	8,131	1,585	7,288	483	6,680	92	6,087
Assistant principals	1,266	9,529	290	7,907	284	7,704	58	7,974	20	6,900	.....	.....
Junior high-school administrators:												
Principals	477	11,046	779	9,405	955	9,113	262	8,290	78	7,237	13	5,865
Assistant principals	827	9,465	542	8,240	559	7,975	93	7,648	11	6,477	.....	.....
Supervising deans, counselors, and department heads	170	8,441	406	7,236	377	7,234	38	6,776	11	5,886	.....	.....
High-school administrators:												
Principals	540	12,534	834	10,275	771	9,998	376	8,851	196	7,781	48	6,833
Assistant principals	813	10,181	958	8,868	793	8,826	207	7,946	39	7,032	10	6,600
Supervising deans and counselors	368	8,967	656	7,612	625	7,763	137	7,411	21	6,298	.....	.....
Supervising department heads	803	10,369	603	8,078	352	7,898	39	8,276	.....	.....	.....	.....
Junior-college administrators:												
Presidents or other chief administrators	17	15,426	39	12,827	37	11,466	6	8,833	.....	.....	.....	.....
Assistant administrators, deans, and department heads	162	11,123	180	10,475	97	9,508	13	8,058	.....	.....	.....	.....
Principals of part-time or continuation schools, or adult education	55	12,377	55	10,614	21	11,226	.....	.....	.....	.....	.....	.....
CENTRAL-OFFICE ADMINISTRATIVE AND SUPERVISORY STAFF:												
General administration:												
Superintendents	23	25,869	139	18,791	501	15,446	359	12,445	224	10,306	73	8,731
Deputy superintendents	7	19,407	26	15,146	20	12,959	.....	.....	.....	.....	.....	.....
Associate superintendents	36	19,582	18	12,498	7	13,751	.....	.....	.....	.....	.....	.....
Assistant superintendents	135	16,275	270	13,239	467	11,769	155	9,864	20	8,545	.....	.....
Secretaries of boards of education	14	10,597	34	7,957	95	8,025	89	5,929	50	4,640	12	3,683
Administrative assistants to superintendents	28	11,946	68	10,360	157	9,642	15	9,050	.....	.....	.....	.....
Secretaries to superintendents	21	6,539	107	5,620	341	4,985	334	4,034	181	3,601	52	3,180

Business administration:												
Business managers	14	17,167	64	11,797	227	9,653	101	8,362	28	6,525	.....	.....
Assistant business managers	16	12,520	26	9,786	60	7,608	.....	.....	.....	.....	.....	.....
Purchasing officers	52	9,737	109	7,906	77	7,316	.....	.....	.....	.....	.....	.....
Auditors	24	9,149	45	6,950	15	6,498	.....	.....	.....	.....	.....	.....
Accountants	31	10,137	109	7,180	99	6,083	32	5,691	.....	.....	.....	.....
Building operation and maintenance	91	10,713	242	8,398	391	7,582	.....	.....	.....	.....	.....	.....
Building planning and construction	50	12,676	71	9,512	22	8,612	169	6,161	46	5,404	.....	.....
Educational divisions:												
Elementary education	250	10,406	353	8,980	369	8,417	101	7,835	24	6,883	.....	.....
Secondary education	105	11,022	141	9,729	99	9,687	23	8,541	.....	.....	.....	.....
Adult education	69	10,788	103	9,231	104	9,168	29	8,371	.....	.....	.....	.....
Special education and related fields	128	9,964	204	7,829	339	7,035	107	5,993	29	5,819	.....	.....
General education or instructional service	35	13,232	76	9,620	98	8,812	22	8,468	.....	.....	.....	.....
Special subjects:												
Art	75	9,786	161	7,968	254	7,447	53	6,373	29	5,288	.....	.....
Home economics	48	10,214	80	8,673	72	7,522	36	5,406	42	4,929	.....	.....
Manual training or industrial arts	48	9,879	61	9,102	71	8,142	30	6,270	35	5,444	.....	.....
Music	103	9,624	252	8,021	469	7,683	150	6,419	97	5,529	18	5,289
Physical and health education	137	10,532	230	9,100	344	8,219	87	7,075	77	5,424	.....	.....
Vocational education	70	9,847	101	9,291	114	8,227	31	7,289	24	6,154	.....	.....
Special services:												
Curriculum	91	10,509	65	9,844	136	9,575	44	8,134	.....	.....	.....	.....
Employee personnel	82	11,861	108	9,775	44	10,148	.....	.....	.....	.....	.....	.....
Pupil personnel:												
General	29	10,001	57	9,780	95	9,003	22	7,805	.....	.....	.....	.....
Attendance	99	10,773	117	8,243	165	7,212	32	5,969	15	4,657	.....	.....
Guidance	81	10,119	132	8,889	220	7,816	155	6,924	58	6,259	.....	.....
Placement	7	9,201	11	9,534	11	8,853	.....	.....	.....	.....	.....	.....
Psychiatric service	85	10,777	19	8,333	.....	.....	.....	.....	.....	.....	.....	.....
Psychological service	106	7,948	194	8,221	299	8,004	36	8,189	.....	.....	.....	.....
Tests and measurements	54	8,963	68	7,588	58	7,419	12	7,375	.....	.....	.....	.....
Audio-visual education	117	9,455	153	8,781	187	8,150	22	7,882	.....	.....	.....	.....
Library service	65	10,142	91	8,141	194	7,190	136	6,124	65	5,470	.....	.....
Research	51	10,909	67	9,712	31	9,061	.....	.....	.....	.....	.....	.....
Health service	93	10,004	61	9,162	31	8,348	38	5,595	33	4,895	.....	.....
Food	44	10,384	166	7,449	254	6,257	119	4,665	28	3,975	.....	.....
Transportation	11	9,796	47	7,199	78	6,597	41	5,372	21	4,560	.....	.....
OTHER SCHOOL EMPLOYEES:												
Attendance officers	652	6,685	747	6,142	213	5,541	68	4,096	7	2,679	.....	.....
Nurses	1,144	6,053	1,692	5,563	1,749	5,537	523	5,254	136	4,783	22	3,841
Custodians and janitors	.....	.....	.....	.....	.....	.....	4,817	3,774	1,385	3,550	232	3,459
Stenographers, typists, and clerks in principals' offices	.....	.....	.....	.....	.....	.....	1,429	2,973	344	2,715	39	2,712
Stenographers, typists, and clerks in offices of administrative and supervisory officers	.....	.....	.....	.....	.....	.....	726	3,563	166	3,331	27	3,120

[a] Questionnaires sent to one-fourth total number of districts; percent of replies to questionnaires as follows: Group IV, 78.4 percent; Group V, 56.1 percent; Group VI, 34.9 percent.

positions which are reported on in the salary survey, and gives for each of six population groups the number of persons who are represented in the average salary shown for each position. Some positions reported upon separately for the larger districts were combined or not reported by the smaller districts. Taken as a whole, Table 5 provides much significant data as to the relative distribution of various personnel groups within urban school systems. The numbers are comparable within groups, but should not be added across to strike national totals, as differing proportions of districts are represented in the various groups. The percents of representation are shown at the beginning of the table.

For further details see: *Salaries and Salary Schedules of Urban School Employees, 1960-61,* Research Report 1961-R17. This Report summarizes data for districts 30,000 and over in population, reported separately by district in nine earlier Research Reports. It also includes group data for smaller districts, not reported upon individually. A list of the 10 reports of the 1960-61 Biennial Salary Survey is given below.

TWENTIETH BIENNIAL SALARY SURVEY

1. *Salary Schedules, Classroom Teachers, Urban Districts 100,000 and Over in Population, 1960-61.* Research Report 1960-R11. October 1960. 31 p. 50¢. Stock #43-568.
2. *Salary Schedules, Classroom Teachers, Urban Districts 30,000-99,999 in Population, 1960-61.* Research Report 1961-R2. February 1961. 59 p. 75¢. Stock #43-574.
3. *Salary Schedule Maximums for School Administrators, 1960-61, Urban Districts 100,000 and Over in Population.* Research Report 1960-R14. November 1960. 47 p. 75¢. Stock #43-571.
4. *Salary Schedule Maximums for School Administrators, 1960-61, Urban Districts 30,000-99,999 in Population.* Research Report 1961-R5. March 1961. 60 p. $1. Stock #43-577.
5. *Salaries Paid Classroom Teachers, Principals, and Certain Others, 1960-61, Urban Districts 100,000 and Over in Population.* Research Report 1961-R8. May 1961. 82 p. 75¢. Stock #43-580.
6. *Salaries Paid Central-Office School Administrators, 1960-61, Urban Districts 100,000 and Over in Population.* Research Report 1961-R11. June 1961. 83 p. 75¢. Stock #43-583.
7. *Salaries Paid Classroom Teachers and Certain Other School Employees, 1960-61, Urban Districts 30,000 to 100,000 in Population.* Research Report 1961-R13. July 1961. 90 p. 75¢. Stock #43-585.
8. *Salaries Paid Principals and Certain Other School Employees, 1960-61, Urban Districts 30,000 to 100,000 in Population.* Research Report 1961-R14. July 1961. 91 p. 75¢. Stock #43-586.
9. *Salaries Paid Central-Office Administrators, 1960-61, Urban Districts 30,000 to 100,000 in Population.* Research Report 1961-R15. August 1961. 103 p. $1. Stock #43-587.
10. *Salaries and Salary Schedules of Urban School Employees, 1960-61.* Research Report 1961-R17. (Summary of the biennial survey). In process. 75¢.

Our Changing Population

—*demands re-thinking of education for employment*

How YOUTH, the unskilled, the older worker, the Negro, and persons residing in depressed areas fare in the current decade will be the prime determinant of social and economic progress, asserted Seymour L. Wolfbein, Deputy Assistant Secretary of Labor, before the Fourth National Conference on School Finance in St. Louis on April 27. He was speaking before an assembly of school finance experts from all sections of the nation.

Wolfbein predicted a net increase of 13.5 million in the labor force for the 1960's, the biggest rise of this group in our country's history. He derived this figure from the following balance sheet:

	(Millions)
Number of workers in 1960	73.6
Subtract	
Withdrawals from the labor force because of death, retirement, marriage, childbearing, etc.	15.5
1960 workers still in labor force in 1970	58.1
Add:	
Young workers coming into the labor force during the 1960's	26.0
Women returning to the labor force during the 1960's	3.0
Number of workers in 1970	87.1

In contrast to the 26 million new young workers entering the job market during this decade, Wolfbein said there would be an actual decrease among men in the critically important 35-44 working age group. He observed, too, that with the impact of technological change we are a country which has more persons in industries which produce services than in industries which produce tangible goods. The 33 million service workers are employed in such areas as transportation, trade, finance, and government. The 24 million workers in goods-producing industries are divided among manufacturing, construction, mining, and agriculture.

Along with the shift to service-producing industries, Wolfbein noted the relative shift from farm workers and unskilled workers to the skilled and white-collar group as outlined in detail in Table 1.

Having presented the major relevant trends in our labor force shift, Wolfbein pointed out the issue for each of the five population groups named at the outset.

For teen-agers the issue is that their unemployment rates are about double the national average. The unemployment experiences of the school drop-outs are especially severe, triple the national average. At current drop-out rates, 7.5 million of the 26 million new young workers for the decade will not have high-school diplomas.

For the unskilled worker the issue is that opportunities will become fewer. Today 1 in 5 unskilled workers is unemployed.

Negroes account for 1 in 10 workers, but 2 in 10 of the unemployed. Several factors account for this. They tend to have the lowest educational attainment, are highly concentrated in the unskilled trades, and experience a substantial amount of discrimination.

For workers in the 45-and-older age group the unemployment rate is favorable, but if such persons lose their jobs, they face difficulty getting a new one.

The fifth group arises from changes in American industry that leave islands of substantial unemployment, both in occupations and in geographic areas. Two in three of the major labor areas in the U.S. now have a substantial labor surplus.

Wolfbein suggested pathways for solving labor problems for these groups. He called for action to end discriminatory education and employment practices against Negroes and older workers. He recommended taking steps toward increasing the mobility of the labor force. He saw promise in programs designed to mitigate and prevent displacement effects of technological improvements.

A major pathway toward solution of our problems, Wolfbein said, was education, training, and skill development with his definition of education containing this dimension: "To help the person withstand the inevitable changes between what he learns and what will be expected of him throughout his life." Amplifying this view of education, Wolfbein said: "This argues for viewing education and training as a development process which continues throughout the lifetime of an individual. It calls for the development of guidance and counseling at the elementary-school level; for more creative and meaningful curricula—especially for the manually talented—at the secondary-school level in order to increase the holding power of the schools; for the broadest kind of training to increase the flexibility, the adaptability of persons vis-a-vis the changing job world; for an organized, systematic program of supported re-training and re-skilling of unemployed workers to fit them for new, different employment opportunities."

1—TRENDS IN OCCUPATIONAL DISTRIBUTION

Occupation	1910	1959	1970
WHITE-COLLAR WORKERS	22%	42%	45%
Professional and technical	5	11	13
Proprietary and managerial	7	11	11
Clerical and sales	10	20	21
BLUE-COLLAR WORKERS	37	37	36
Skilled	12	13	13
Semiskilled	14	18	18
Unskilled	11	6	5
SERVICE WORKERS	10	12	13
FARM WORKERS	31	9	6
Total	100%	100%	100%

For Dr. Wolfbein's full paper and the other papers presented at the Fourth National School Finance Conference, see: National Education Association, Committee on Educational Finance. *Financing Education for Our Changing Population.* Washington, D. C.: the Association, 1961. 111 p. $1. Stock #51-128.

College Teachers: Demand Exceeds Supply

Of new teachers entering college, 1 in 4 has a doctor's degree; 1 in 6 has not earned a master's degree.

"AT THIS MOMENT the evidence indicates that institutions of higher education cannot be staffed with the needed number of competent teachers. . . . The employing officer has no alternative but to choose between an insufficient number and an inferior quality of new teachers."

These words highlight the findings of the NEA Research Division's fourth biennial study of teacher supply and demand in universities, colleges, and junior colleges. Liberal free distribution of the 88-page report to administrative officials was made possible by support of the Ford Foundation.

The investigation explored these five questions:

1. What are the qualifications of the 1960-61 group of newly employed full-time college teachers and how do they compare with earlier years?

2. From what sources do new teachers come?

3. What new sources might be explored more fully?

4. What occupations claim new graduates at the doctor's degree level?

5. What is the expected need for new teachers in higher education the next decade?

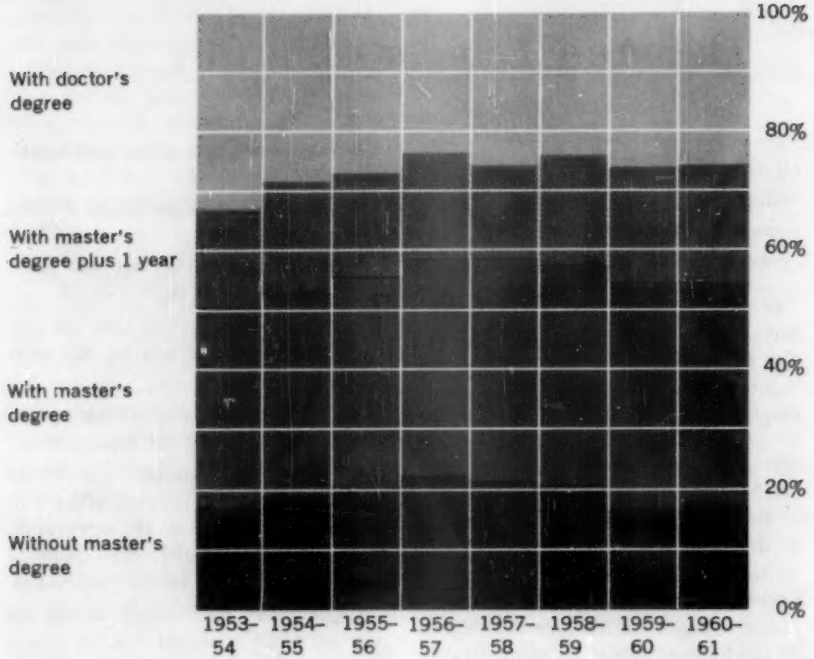
The first question—qualifications of new teachers—brings out these facts:

- The limited resources available do not enable many employing officers to compete successfully in the open manpower market for the best qualified persons who might become candidates.
- Conditions vary widely among the different types of institutions, and from campus to campus within each type.
- The shortage of qualified candidates is much more acute in some fields than in others.
- During the seven years covered by the study, the general trend has been toward the acceptance of less well-qualified candidates.

1—PERCENT OF NEW TEACHERS AT EACH OF FOUR LEVELS OF PREPARATION, 1953-54 TO 1960-61

Year	With doctor's degree	With master's degree plus 1 year	With master's degree	Without master's degree
1953-54	31.4%	18.2%	32.2%	18.2%
1954-55	28.4	18.7	33.6	19.3
1955-56	26.7	17.8	35.4	20.1
1956-57	23.5	18.1	35.3	23.1
1957-58	25.3	16.2	36.7	21.8
1958-59	23.8	18.7	36.7	20.8
1959-60	25.9	19.9	37.1	17.1
1960-61	25.8	20.0	36.8	17.4

NEW TEACHERS AT FOUR LEVELS OF PREPARATION



NEA Research Division

Preparation of New Teachers

In 1953-54, as many as 31.4 percent of the new teachers employed by universities and colleges held the doctor's degree. This figure fell steadily to 23.5 in 1956-57 and has shown only slight recovery—to 25.8 in 1960-61. At the other end of the preparation scale (new teachers without the master's degree) the percent was 18.2 in 1953-54. It went up to 23.1 in 1956-57, then back down to 17.4 in 1960-61. Throughout the seven-year period the trend has been toward the acceptance of more new teachers with only the master's degree. The first graph shows the year-by-year record at each of four levels of preparation. (See also Table 1.)

The universities, both public and nonpublic, have been the most successful in competing for candidates with comprehensive preparation. Last year, of the new teachers employed by 100 nonpublic universities, 35.9 percent held the doctor's degree. In 13 municipal universities, 90 state universities, and 59 land-grant colleges this was 29 plus percent. But only 22.6 percent of the new teachers in the 168 state colleges, 21.4 percent in the 129 large nonpublic colleges, about 17 percent in the 505 small colleges, and 15.9 percent in the 70 teachers colleges entered service with the highest academic degree.

On the other hand, the larger institutions show a greater readiness to employ new teachers whose preparation is below the master's degree level. The land-grant colleges were high, with 23.4 percent, and the state colleges were low, with 12.7 percent. And the picture is further complicated by the

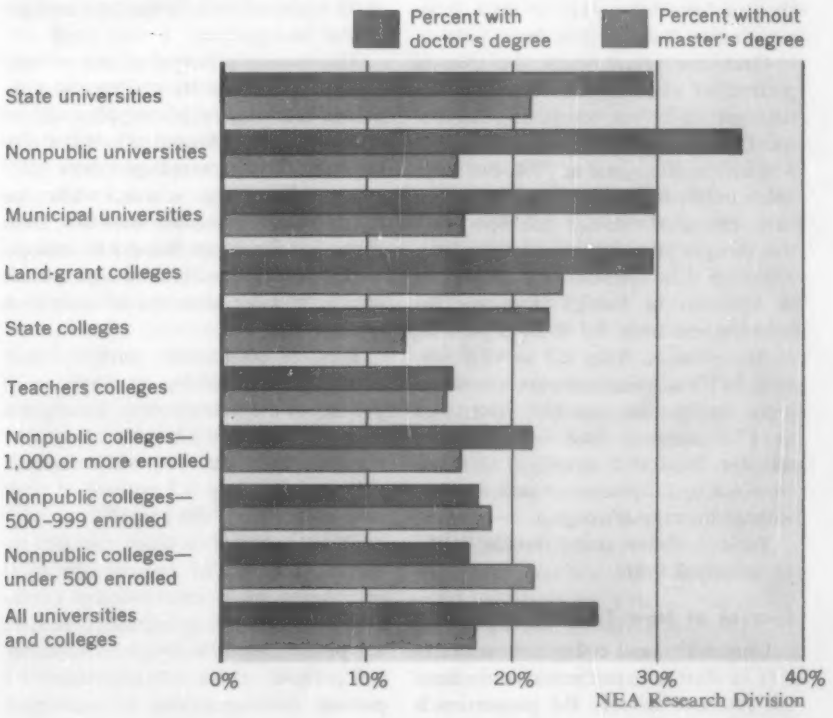
fact that the larger institutions use greater numbers of part-time teachers, about whose qualifications little is known. The second graph brings out the differences in employment procedures of the nine types of universities and colleges.

Field-by-Field Differences

Variations among teaching fields are even wider than among types of institutions. The percent of new teachers in 1953-54 holding doctor's degrees was 68.4 percent in psychology, 54.5 percent in the biological sciences, and 53.0 percent in the physical sciences. At the bottom of the list of major fields were fine arts, with only 12.2 percent, engineering, with 15.9 percent, and business and commerce, with 21.4 percent of the new teachers holding doctorates. Seven years later, psychology was down to 51.9 percent, biological sciences to 48.2 percent, and physical sciences 47.4 percent. Even more drastic were the declines in foreign languages, from 36.3 to 21.3 percent; in mathematics, from 34.2 to 22.2 percent; and in English, from 29.0 to 13.6 percent of new teachers with the doctor's degree.

Engineering increased its percent of new teachers with top-level degrees from 15.9 to 25.9 percent, but this 1-in-4 is more than offset by the fact that 1 of every 3 (33.5 percent) of the new teachers of engineering entered

INSTITUTIONS OF ALL TYPES ARE SHORT OF NEW TEACHERS WITH DOCTORATES, 1960-61



NEA Research Division

2—PERCENT OF NEW FULL-TIME TEACHERS AT HIGH AND LOW LEVELS OF PREPARATION, 1953-54 AND 1960-61

Field	With doctor's degree		With less than master's degree	
	1953-54	1960-61	1953-54	1960-61
Engineering	15.9%	25.9%	45.5%	33.5%
Health sciences[a]	34.2	18.9	32.3	33.5
Agriculture	34.9	35.0	28.0	33.0
Fine arts	12.2	10.2	20.3	19.4
Physical sciences	53.0	47.4	14.0	15.5
Mathematics	34.2	22.2	8.3	15.5
Foreign languages	36.3	21.3	8.9	14.6
Business and commerce	21.4	15.8	15.9	13.0
Biological sciences	54.5	48.2	5.6	12.8
English	29.0	13.6	8.0	11.6
Education	36.5	31.5	7.6	10.9
Social sciences	42.4	35.9	6.4	5.0
Psychology	68.4	51.9	1.7	4.4

[a] Does not include dentistry and medicine.

full-time service before completing the requirements for the master's degree. In many college classes in engineering the teachers have only a little more preparation than some of their students.

Over the seven years the over-all percent of new teachers entering full-time service before completing requirements for the master's degree decreased just a little, from 18.2 to 17.4. But some fields suffered seriously. The number of new biological science teachers with this meager preparation increased from 5.6 percent in 1953-54 to 12.8 percent in 1960-61. In foreign languages the increase was from 8.9 to 14.6 percent; in mathematics, from 8.3 to 15.5 percent. In the physical sciences, encouragingly, the increase was only from 14.0 to 15.5 percent. And in the social sciences there was actually a decrease from 6.4 to 5.0 percent of new teachers without the master's degree.

Table 2 shows many details in the 13 principal fields.

Sources of New Teachers

Universities and colleges draw nearly half of their new teachers directly from the graduate schools; the proportion is far greater than from any other source. The average is 46.3 percent, with the largest nonpublic colleges being high at 52.6 percent and the teachers colleges low at 36.8 percent.

The second principal source of new college and university teachers is high-school teaching, which supplies almost 1 of every 8 (12.0 percent) of the new teachers. Teachers colleges drew 26.7 percent from this source, while the multiple-unit institutions were low, from about 6 to 9 percent. Nonpublic colleges took new teachers from the high schools at a little more than the all-institution average rate.

Business occupations were the only other source supplying as many as 10 percent of the new teachers. Land-grant colleges drew 13.9 percent of their new teachers from business, while teachers colleges took only 3.5 percent of their new supply from this source.

Other reported sources include research agencies, 6.7 percent; the most recent class of bachelor's degree graduates, 4.3 percent; government service, 2.7 percent; elementary-school teaching, 2.6 percent; school administration, 2.5 percent; military service, 1.7 percent.

Junior colleges, on the other hand, took only 23.2 percent of their new teachers from graduate school. At the same time they attracted 29.3 percent from high-school teaching, and 11.0 percent from business occupations. As many as 15.4 percent were full-time teachers in universities and colleges the preceding year. In contrast, the latter drew only 1.7 percent of their new teachers from junior-college teaching the preceding year.

Can Women Be Employed More Extensively?

The report brings out these two seemingly conflicting facts: (a) Three-fourths of the employing officials indicate readiness to employ women teachers in larger numbers, many of them in almost all fields. (b) The percent of women among newly employed teachers has changed little since 1953-54. That year it was 23.7; in 1956-57 it went as high as 25.2; in 1960-61 it was exactly 24 percent.

Women receive about one-third of all bachelor's and master's degrees, but only about one-tenth of the doctor's degrees. And among the latter group, their distribution among the major fields is not in proportion to the need for college teachers. These figures are illustrative: Ten percent of the women receiving the doctorate in 1960-61 were in psychology, a field claiming only 2.9 percent of the new teachers; mathematics, with 6.0 percent of the new teachers, attracted fewer than 2 percent of the women receiving the doctorate.

Retirement Age a Factor

The first need for new teachers is to replace those who retire. Voluntary retirements are far out-numbered by those required of persons who attain a designated retirement age.

Most universities and colleges (73.4 percent) maintain regulations governing compulsory retirement from classroom service. Age 70 is most frequently designated — by 52.9 percent of the reporting institutions. Age 65 is the time specified by 32.9 percent. Of those not having such a regulation in force, just over one-half are small nonpublic colleges, many of them staffed by dedicated personnel. No backlog of information is available to show whether the growing shortage of qualified new teachers has affected these regulations in any way.

Competition Is Keen

It is widely recognized that the greatest accomplishment in elementary education during the past decade has been the upgrading of the whole corps of more than 800,000 classroom teachers—a steady march toward the bachelor's degree as the minimum. Significant, too, is the achievement of the master's degree level by more than one-third of some 550,000 high-school teachers. And equally obvious is the ambition of the university and college administrator to build up the general scholarship of his staff through the employment of new teachers with more-than-average formal preparation. Naturally, attention is thus focused upon each merging class of graduates at the doctor's degree level, as prospective candidates.

What happens, occupationally, to the annual production of the graduate and professional schools has been the object of NEA Research Division studies for the past six years. The evidence now at hand confirms what many employing officials already knew: A large percent — almost one-half — of these highest level graduates are already well settled in occupations in which they continue; the fact that they receive doctor's degrees does not add to the reservoir of "new supply."

3—DOCTOR'S DEGREE GRADUATES OF 1958-59 AND 1959-60 IN COLLEGE TEACHING SERVICE

Field	Number reported	Percent		
		Continuing in college teaching	Entering college teaching	Total in college teaching
English	726	55.3%	35.9%	91.2%
Philosophy	196	43.4	43.4	86.8
Foreign languages	361	43.5	40.5	84.0
Geography	99	42.4	40.5	82.9
Accounting	33	72.8	6.1	78.9
History	580	42.4	35.0	77.2
Miscellaneous fine arts	104	53.8	20.1	73.9
Speech and dramatics	273	50.9	23.0	73.9
Physical and health education	113	46.0	26.5	72.5
Music	244	49.2	22.5	71.7
Sociology	275	41.1	28.4	69.5
Economics	455	34.5	33.2	67.7
Miscellaneous business and commerce	175	46.3	20.6	66.9
Forestry	32	40.6	21.9	62.5
Political science	317	35.6	26.8	62.4
Mathematics	479	22.6	37.6	60.2
Law	43	51.2	7.0	58.2
Home economics	65	26.1	29.3	55.4
Miscellaneous social science	208	36.9	26.0	52.9
Education (Ph.D.)	925	30.1	22.4	52.5
Religion	278	27.7	22.7	50.4
ALL FIELDS	16,252	22.9	22.7	45.6
Industrial and vocational arts	11	45.4	0.0	45.4
Education (Ed.D.)	1,477	24.1	18.3	42.4
Miscellaneous (general)	201	25.3	15.9	41.2
Biological science	1,677	12.8	23.9	36.7
Geology	335	13.1	23.6	36.7
Engineering	1,151	16.1	19.5	35.6
Agriculture	854	16.7	18.6	35.3
Miscellaneous physical science	320	12.8	16.3	29.1
Psychology	1,109	11.1	17.0	28.1
Health professions[a]	345	10.7	17.1	27.8
Physics	885	7.8	18.7	26.5
Chemistry	1,864	4.7	14.6	19.3
Library science	42	7.1	2.4	9.5

[a] Does not include dentistry and medicine.

Recently the doctor's degree graduating class has included just above 9000 men and women per year. Of those graduating in 1958-59 and 1959-60, some 23 percent were already fully engaged in college teaching, and 20 percent were at work in other occupations. Since both of these groups continued in fields already chosen, only slightly more than one-half of the graduates offered themselves as candidates for new positions. (Most of this latter group had been on campus, principally engaged as graduate students, during the year ending in graduation.) This meant, in reality, that the newly available group in each of these years was only about 5000.

All of these—and more—would be needed by the institutions of higher education if the scholarship of the entire corps of teachers were to be strengthened. But the investigation shows that college teaching was the choice of less than one-half (43.2 percent) of the doctor's degree graduates of the past two years who entered new occupations. The acute shortage of highly qualified candidates for teaching certain college subjects is not simply that the graduate schools do not produce them in considerable numbers. *The fact to be recognized is that other occupations outbid the colleges and universities for their services.*

A field-by-field analysis of the data shows wide variations. As to be expected, the fields attracting the highest percent of new teachers at the time of graduation are, in general, the fields in which the highest percents of graduates are already engaged. English stands at the top of the list: 55.3 percent of the graduates are already serving as teachers in universities, colleges, and junior colleges; 35.9 percent enter this occupation, thus enabling the enterprise of higher education to profit by the services of 91.2 percent of these scholars.

Graduates in foreign languages also contribute heavily to the occupation of college teaching, as do the graduates in the social science fields—history, sociology, economics, and political science, in that order.

In certain fields, however, the employer of college teachers encounters difficulty. Just under 1 of every 5 (19.3 percent) of the doctor's degree graduates in chemistry, and just over 1 of every 4 (26.5 percent) in physics are found in college teaching positions. Also, only 1 of every 3 (35.6 percent) graduates in engineering contributes to the teaching profession. The many other needs and opportunities take most of these men into research, industry, business, and government service.

Table 3 presents a full distribution of graduates of the past two years on a field-by-field basis.

Outlook for Future Needs

The report offers a projection of staff needs in higher education for the

4—ESTIMATED NUMBER OF FULL-TIME UNIVERSITY, COLLEGE, AND JUNIOR-COLLEGE TEACHERS NEEDED, 1958-59 THROUGH 1969-70

Year	Increase in enrollment over preceding year	Total enrollment	Number of full-time teachers	Student-teacher ratio	New teachers needed		
					Replacements at 6%	Additions to meet increased enrollment	Total
1958-59	200,000	3,250,000	250,000	13.00 to 1	.....	.....	.....
1959-60	220,000	3,470,000	261,887	13.25 to 1	15,000	11,900	26,900
1960-61	230,000	3,700,000	274,074	13.50 to 1	15,700	12,200	27,900
1961-62	240,000	3,940,000	286,545	13.75 to 1	16,400	12,500	28,900
1962-63	250,000	4,190,000	299,286	14.00 to 1	17,200	12,700	29,900
1963-64	260,000	4,450,000	312,281	14.25 to 1	18,000	13,000	31,000
1964-65	270,000	4,720,000	325,517	14.50 to 1	18,700	13,200	31,900
1965-66	275,000	3,995,000	338,644	14.75 to 1	19,500	13,100	32,600
1966-67	280,000	5,275,000	351,667	15.00 to 1	20,300	13,000	33,300
1967-68	285,000	5,560,000	364,590	15.25 to 1	21,100	12,900	34,000
1968-69	290,000	5,850,000	377,419	15.50 to 1	21,900	12,800	34,700
1969-70	300,000	6,150,000	390,476	15.75 to 1	22,600	13,100	35,700
Total	3,100,000	.....	.....	.....	206,400	140,400	346,800

NOTE: The estimates offered in this table assume that (a) enrollments will increase at a consistent rate, (b) the number of teachers in service will increase at a slower pace, bringing about (c) a steady increase in student-teacher ratio, and (d) the rate of annual replacements will remain constant.

next decade. Based on an assumed enrollment of 6,150,000 students in 1970, with a gradual increase in student-teacher ratio from the present 13 to 1 to about 16 to 1, and with the continued use of many part-time teachers, the expected need will average about 31,000 new teachers per year. In September 1961 the projection calls for 16,400 for replacement of those retiring for all reasons and 12,500 to serve the expected increase in enrollment.

During the next few years it seems likely that the greatest need for new teachers will be in the sciences—almost 49,000. Next will be social sciences and fine arts, some 37,000 each. Following closely in future demands will be English, education and engineering.

Table 4 summarizes the projection of staff needs in universities, colleges, and junior colleges, year by year, up to 1970.

For details see: National Education Association, Research Division. *Teacher Supply and Demand in Universities, Colleges, and Junior Colleges, 1959-60 and 1960-61.* Research Report 1961-R12. Washington, D. C.: the Association, May 1961. 88 p. Single copy free from the NEA Research Division while the supply lasts.

STUDENT INCENTIVES

THE QUESTION: How can the academically talented pupil be stimulated and, if need be, coerced into undertaking the more difficult program indicated by his ability?

THE RESPONSE: Fortunately, in most communities, solid, rigorous courses are in demand by capable students. However, several factors can be considered in relation to this problem. One is the availability of "role models." A pupil or his parent may number among his personal acquaintances a physician, but a scientist may seem to be unreal. Such role models may be provided, at least in part, by successful people in the community who are willing to provide some guidance to pupil and parent on a personal basis.

Informing the student of the extent and nature of his ability may provide him with the incentive to make a more determined effort to utilize this ability than he might otherwise have done. . . .

It should be kept in mind that pupils below the median in high schools having a student body of high ability typically have a greater capacity for academic achievement than many pupils in the upper half of secondary schools with a student body whose ability is average or below average. In such a situation the pupil should be encouraged to undertake rigorous courses regardless of his standing in class.

The hope of financial assistance to help defray college expenses may be a very real incentive to better achievement. Although it is recognized that scholarships will not alone solve the problems involved in the loss of academically talented pupils from college, high-school seniors name lack of finances as a major reason for not planning to attend institutions of higher learning.—NEA, *The Identification and Education of the Academically Talented Student in the American Secondary School,* February 1958. p. 50-51.

Financing a College Education

A Major Problem of America's Talented Youth

The Committee on Discussion and Debate Materials and Interstate Cooperation, National University Extension Association, has chosen for the national high-school forensic series for the academic year 1961-62 this question, What should be the role of the federal government in education? For the discussion and debate manual, the NEA Research Division prepared a statement on the affirmative side of the three discussion questions. The section on the question, Should federal aid be provided for qualified students? is reproduced here by permission. Anyone interested in participating in the program should get in touch with Dr. Bower Aly, Box 5152, University Station, Eugene, Oregon.

IN A DEMOCRACY, education is the power of human fulfillment. It creates and enlarges not only capacity to produce and destroy, but also capacity to consume and enjoy. Through the enrichment of men's minds, we strive to put material abundance to constructive and satisfying use on behalf of free human beings. The Committee for Economic Development expressed the dual function of education as follows:

> The spread of knowledge, the incitement and satisfaction of curiosities, is part of general betterment in standards of living. This should be a main objective of our society, even if it were not important for growth. However, we must also look at education as it affects economic growth, and there is no doubt that it constitutes one of the bedrock supports of growth.
>
> Fortunately, educational policies conducive to economic growth and those leading to a satisfying personal life are not in conflict.[1]

Although 8 adults in 100 have been college educated, many talented youth end their formal education with high-school graduation. In 1960, 90.3 percent of the 14-to-17-year-olds were enrolled in school; 38.4 percent of the 18-to-19-year-olds; and 13.1 percent of the 20-to-24-year-olds.[2] Those 14 to 17 years of age in school may be considered as being in high school; those 18 and 19 and the majority of those 20 to 24 years of age, as being in college. The figures given above show that

[1] Committee for Economic Development, Research and Policy Committee. **Economic Growth in the United States: Its Past and Future.** New York: the Committee, February 1958. p. 50-51.

[2] U. S. Department of Commerce, Bureau of the Census. **Fall School Enrollment at 46 Million.** Current Population Reports, Population Characteristics, Series P-20, No. 107. Washington, D. C.: the Bureau, January 16, 1961. p. 2.

most youths terminate their formal education when they finish high school. This brings up the question, How many youth of high ability actually go to college?

Bridgman presented a table showing the percents of high-school seniors going to college: [3]

	Total entrants	Immediate entrants	Current total estimate
Entire high-school graduating class:			
Boys and girls	46%	37%	46%
Boys	56	41	56
Girls	36	32	36
Upper 30 percent in ability			
Boys and girls	69	58	66
Boys	85	65	77
Girls	55	50	55
Upper 10 percent in ability:			
Boys and girls	77	73	76
Boys	94	80	88
Girls	61	65	65

In 1947, the President's Commission on Higher Education stated that 32 percent of the population have the mental ability to profit from a college education, [4] and another study found that less than half of those capable of completing college enter college, and of those who start college only 60 percent graduate. [5]

Wolfle found that 53 percent of those in the top 20 percent of their high-school graduating class enter college, and 82 percent of this group graduate from college. Wolfle also found on studying high-school grades and intelligence together, that 38 percent of the most select group—those graduating in the top fifth of their high-school class and having AGCT scores of 145 or higher—do not enter college. Of those graduating in the top fifth of their high-school class and having AGCT scores of 115 or higher, 49 percent do not enter college. [6]

Why this waste of human resources? Why do not more of our talented youth go to college? Many different reasons may be mentioned, for example, lack of interest in college education on the part of the youth himself, his family, and his friends; lack of a college within commuting distance of home; lack of money; or a combination of these reasons.

Many studies of the reasons why superior students do not go to college show that the economic factor is important, most often more important than any other single reason. For example, Barber found that 183 of 763 high-school graduates in Erie, Pennsylvania, had IQ's of 115 or higher, presumably required for success in college. Of 111 who did not go to college, 34 percent gave lack of funds as the chief reason. [7] In another study, students were asked to list the reasons why they might not go to college; almost half said the expense would be an important reason, and 12 percent said it would

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[3] Bridgman, Donald S. "Where the Loss of Talent Occurs and Why." **College Admissions 7: The Search for Talent.** New York: College Entrance Board, 1960. p. 39.

[4] President's Commission on Higher Education. "Establishing the Goals." **Higher Education for American Democracy.** Vol. 1. Washington, D. C.: Superintendent of Documents, Government Printing Office, 1947. 103 p.

[5] President's Commission on Higher Education. "Equalizing and Expanding Individual Opportunity." **Higher Education for American Democracy.** Vol. 2. Washington, D. C.: Superintendent of Documents, Government Printing Office, 1947. 69 p.

[6] Wolfle, Dael. **America's Resources of Specialized Talent.** Report of the Commission On Human Resources and Advanced Training. New York: Harper and Brothers, 1954. 332 p.

[7] Barber, Leroy E. "Why Some Able High-School Graduates Do Not Go to College." **School Review** 59: 93-96; February 1961.

cost more than their families could afford. [8]

Little, in his questionnaire survey of high-school seniors in Wisconsin found that 19 percent of both boys and girls said they would not continue schooling because they could not afford it; 41 percent of the boys and 34 percent of the girls said they would get further education if they had financial assistance. [9]

Wright and Jung reported that of the top 10 percent of the 1955 Indiana high-school graduates who were not going beyond high school 38.1 percent said that the cost of further education prevented them from continuing; the parents of 80.2 percent of the youth said that they had discussed the cost of further education with their children; 11.2 percent said they needed to stay home and help their families financially; and 34.7 percent of the students and 46.6 percent of the parents said that the cost of continuing education was a factor in the decision not to continue in school. [10]

Since a lack of money prevents so many able students from going to college, it is pertinent here to examine the cost of college attendance. The American School Counselor Association estimated the cost of tuition, fees, books, and board and room as follows:

At a state college or teachers college	$ 900 to $1,200 a year
At a state university	$1,300 to $1,500 a year
At a private co-ed college	$1,500 to $1,800 a year
At a private women's college	$1,700 to $2,200 a year
At a private men's college	$1,800 to $2,200 a year
At an institute of technology	$1,900 to $2,400 a year
At a junior college	$1,700 to $2,000 a year[11]

A recent University of Michigan study [12] found that in 1959-60, average college expenses for an unmarried student totaled $1550 a year. Of this sum, $950 came from the student's parents, $360 was money earned by the student, $130 was scholarship money, and $110 came from other sources. Four families in 10 said they found it difficult to meet the college expenses; 2 in 10 said that they not only found the financing difficult but that their financial help was inadequate. Some families managed to set aside money for this purpose in advance, some reduced other expenses, some borrowed money, and in some cases the mother took a job to help pay for the student's college education.

To get some idea of the financial burden on the families, look at the percent distribution of 45,062,000 families by total money income in 1959: [13]

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[8] Cole, Charles C., Jr. **Encouraging Scientific Talent, A Report to the National Science Foundation.** New York: College Entrance Examination Board, July 1955.

[9] Little, J. Kenneth. **A State-Wide Inquiry into Decisions of Youth About Education Beyond High School.** Madison: University of Wisconsin, School of Education, September 1958. p. 67.

[10] Wright, Wendell W., and Jung, Christian W. **Why Capable High School Students Do Not Continue Their Schooling.** Bulletin of the School of Education, Vol. 35, No. 1. Bloomington: Indiana University, January 1959. p. 29-32.

[11] American School Counselor Association. **How About College?** Washington, D. C.: the Association, a Division of the American Personnel and Guidance Association, 1959. p. 9. Available from the Association, 1605 New Hampshire Ave. N. W., Washington 9, D. C., at 25¢ a copy.)

[12] Lansing, John B.; Lorimer, Thomas; and Moriguchi, Chikashi. **How People Pay for College.** Ann Arbor: University of Michigan, September 1960. 160 p.

[13] U. S. Department of Commerce, Bureau of the Census. **Income of Families and Persons in the United States: 1959.** Current Population Reports, Consumer Income, Series P-60, No. 35. Washington, D. C.: the Bureau, January 5, 1961. p. 2.

Under $3,000	23%
$3,000 to $4,999	22
$5,000 to $9,999	43
$10,000 to $14,999	9
$15,000 and over	3
Median income	$5,417

It hardly seems necessary to point out that the typical American family (median income) will have difficulty financing even the cheapest college education. One son in a state university would take one-fourth of all the family income; two would take half of it. What would be left would not provide the basic necessities of life for the rest of the family.

Another aspect is the number of children in a family; it is obvious that the larger the family, the more it costs them to live, and the more children to be educated, the more difficult financially it is for the family. Here are the median incomes of families in 1959 by size of family: [14]

2 persons	$4,281
3 persons	5,539
4 persons	6,070
5 persons	6,094
6 persons	5,798
7 persons or more	5,135

On the assumption that prices and wages remain the same over a 10-year period, a family of six persons earning $57,980 would have to spend $20,800 to $24,000 to send four children to a state university. What family of six can afford it?

One way of helping bright boys and girls to go to college was suggested in a report of the Educational Testing Service. The study, which analyzed the career plans of 10,000 high-school seniors in the top 30 percent on academic aptitude, found that 80 percent of the boys and 70 percent of the girls said they would like to go on to college. Of those who at first said they were not interested in college, four-fifths indicated that they would probably go to college if they had scholarships. The report concluded:

> The fact that a very large number of able students without college plans would be willing to go to college if given a scholarship surely indicates that many students do not have college plans simply because they have never been able to view college as being a reasonable prospect. College is not intrinsically repellent or undesirable to them—it has seemed to be financially unattainable. Given a way to pay their expenses, their plans apparently would readily change; given the assurance early in their school career that college was financially attainable, they might have included in their course work the science, mathematics, and English needed to make it a reality.
>
> We believe that it is in the salvage of cases such as these that a large-scale scholarship program, combined with better counseling in the junior and senior high schools, could most effectively increase the proportion of able students going to college. The existence of such a scholarship program would make it possible for these high school counselors to demonstrate to the "no interest" student that college is, in fact, a real possibility.[15]

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[14] **Ibid.**, p. 6.

[15] Stice, Glen; Mollenkopf, William G.; and Torgerson, Warren S. **Background Factors and College-Going Plans Among High-Aptitude Public High School Seniors.** Princeton, N. J.: Educational Testing Service, August 1956. p. 115.

More Responsibility for Workers in the 1960's

In 1970 we shall have 16 million more children and youth and 3 million more persons of retirement age, but only 11 million more adults of working age than in 1960.

UNOFFICIAL PROJECTIONS of the population purchased from the U. S. Bureau of the Census by the NEA show widely varying rates of increase in numbers of persons in certain age groups. Thus will be created serious financial problems for education during the 1960's.

Here are some changes we can expect:

- For the nation as a whole, population will increase 19 percent.
- The group 22 through 64 years of age—the group that produces most of the workers and taxpayers—is expected to increase 12 percent. The total school-age group (5 through 17) will increase 24 percent, or *twice* as fast as the workers; the high-school-age group (14 through 17), 43 percent, or *three and a half times* as fast as the workers; and the college-age youth (18 through 21), 57 percent, or almost *five times* as fast as the workers.
- In 1960 we had 168 workers for every 100 children and youth of school and college age, but in 1970, we can expect to have fewer—146 workers for every 100 of school and college age.
- The number of children of elementary-school age (5 through 13) is expected to increase 17 percent, but high-school-age youth, 43 percent, or more than twice as fast.
- The number of elderly persons is also expected to increase—21 percent, or almost twice as fast as the workers.

These varying rates of increase will change the distribution by age group. For 1960 and 1970, these distributions are as follows:

	1960	1970 (est.)
Under 5	11.4%	11.5%
5 through 17	24.5	25.4
5 through 13	18.2	17.9
14 through 17	6.2	7.5
18 through 21	5.1	6.8
22 through 64	49.8	46.9
65 and over	9.2	9.4

Total Population

All the states expect an increase in total population with the apparent exception of Arkansas, Mississippi, and West Virginia. Arizona will have the largest increase—54 percent; next will be Florida and Nevada with 53 percent each; and Alaska with 50 percent. Nineteen states will have rates of increase above the national average of 19 percent. Four states (Alaska, Arizona, Florida, and Nevada) will have substantial rates of increase in all age groups.

Children vs. Adults

In four states both the population of working age (22-64 years) and the population of school age (5-17 years) will decrease from 1960 to 1970. Arkansas will have a drop of 21 percent in the school-age group and an 11-percent drop in the number of workers; Mississippi, a drop of 10 percent in the school-age group and a drop of 3 percent in the number of workers. West Virginia will have a drop of 18 percent in the school-age group and a drop of 11 percent in the number of workers.

Three states will have an increase in the 10-year period in the number of

workers but a drop in the school-age population; Alabama, an increase of 7 percent in the number of workers and a drop of 4 percent in the school-age group; and Kentucky and Oklahoma, an increase of 2 percent in the number of workers and a drop of 6 percent in the school-age group.

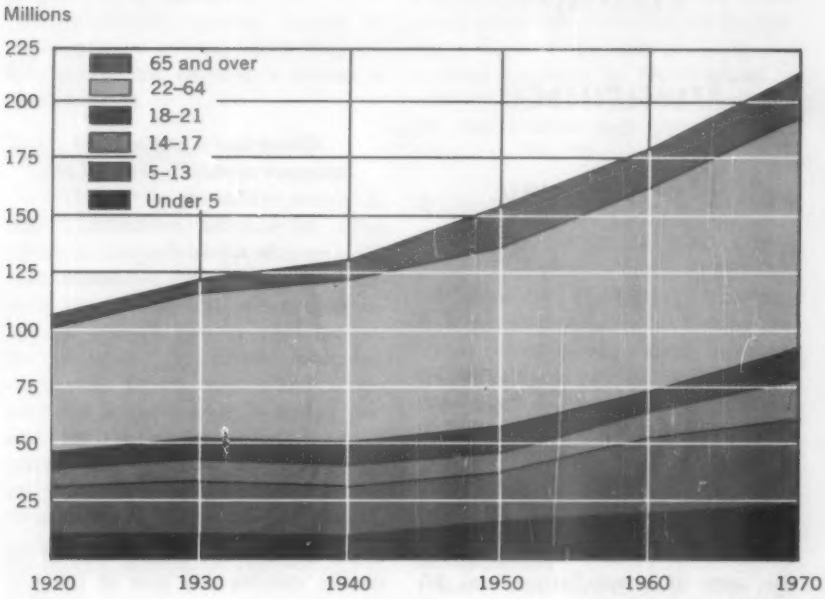
Four states (Iowa, Nebraska, South Dakota, and Vermont) and the District of Columbia will have *fewer workers* in 1970 than in 1960; but will have *more children* of school age: The number aged 5 to 17 years will increase 15 percent in the District of Columbia, 10 percent in Iowa and Nebraska, and 6 percent in South Dakota and Vermont.

Although the remaining 39 states can look forward to increases both in number of school-age and in the number of

1—ESTIMATED PERCENT OF INCREASE IN POPULATION, BY AGE GROUPS, 1960 TO 1970

State	5-13 years	14-17 years	5-17 years	18-21 years	22-64 years	65 years and over	Total population
Total population	17.1%	42.7%	23.6%	56.6%	12.2%	21.0%	19.1%
Alabama	−10.4	14.6	− 3.7	38.3	6.5	16.8	5.2
Alaska	57.3	82.8	62.7	68.5	43.6	48.5	49.9
Arizona	35.6	71.2	44.4	104.7	49.1	60.7	54.4
Arkansas	−28.5	− 1.5	−20.9	20.0	−11.4	8.6	−10.5
California	48.1	86.9	57.7	98.5	27.4	27.5	40.2
Colorado	30.7	50.1	35.4	74.0	22.8	19.5	29.2
Connecticut	32.0	69.1	41.5	59.0	16.4	24.1	27.6
Delaware	40.8	65.8	46.8	80.6	27.5	17.5	34.9
District of Columbia	9.1	31.0	14.5	51.4	− 4.1	7.0	5.1
Florida	43.1	49.9	52.3	96.3	44.4	74.1	52.5
Georgia	− 0.5	24.4	6.0	52.6	13.3	17.7	12.9
Hawaii	10.9	38.9	18.3	51.7	20.0	23.4	21.7
Idaho	4.6	37.3	13.1	58.0	8.7	20.2	13.2
Illinois	22.8	49.0	29.3	58.2	9.0	19.6	19.5
Indiana	20.8	47.7	27.5	62.3	12.6	11.8	19.4
Iowa	4.9	23.5	9.6	40.3	− 1.0	8.9	5.0
Kansas	14.9	31.8	19.1	53.1	8.4	12.0	14.3
Kentucky	−12.0	10.0	− 6.1	36.6	1.8	10.5	2.1
Louisiana	13.2	39.6	19.8	62.1	16.9	22.9	20.9
Maine	1.0	20.3	6.1	40.8	4.2	3.2	7.9
Maryland	32.1	63.7	40.0	69.1	20.4	25.8	30.7
Massachusetts	14.7	38.7	20.9	44.8	3.5	11.8	12.6
Michigan	27.3	51.6	33.2	60.0	14.6	26.8	23.3
Minnesota	17.2	40.2	22.9	55.6	6.7	20.8	16.1
Mississippi	−15.7	7.8	− 9.5	29.5	− 3.2	8.4	− 2.5
Missouri	8.1	27.5	13.2	51.7	4.1	13.0	11.4
Montana	14.8	43.1	21.8	59.9	6.6	17.7	15.4
Nebraska	6.7	17.9	9.5	34.1	− 0.2	13.9	5.8
Nevada	51.5	96.2	62.5	124.1	46.1	21.1	53.2
New Hampshire	16.1	33.8	20.6	52.5	9.4	6.3	15.0
New Jersey	32.4	61.8	39.8	53.1	15.6	28.1	26.0
New Mexico	24.1	46.0	29.3	77.7	37.1	38.5	36.9
New York	18.4	44.8	25.2	45.4	5.8	21.6	15.2
North Carolina	− 6.5	18.4	0.2	43.9	11.2	21.1	9.8
North Dakota	− 6.3	13.0	− 1.2	24.6	− 1.9	9.2	0.2
Ohio	29.9	52.9	35.4	68.5	13.8	14.5	22.9
Oklahoma	−12.0	10.2	− 6.0	38.2	1.8	12.9	2.7
Oregon	16.9	50.1	25.3	57.7	4.6	21.4	14.2
Pennsylvania	6.9	29.3	12.7	32.8	3.4	16.1	9.0
Rhode Island	12.0	35.2	18.0	40.8	1.0	13.9	9.8
South Carolina	− 8.3	23.7	0.3	55.9	11.4	14.9	10.3
South Dakota	2.7	14.0	5.6	29.8	− 3.3	16.1	2.9
Tennessee	− 6.4	18.9	0.4	41.6	6.5	16.2	6.8
Texas	18.8	40.8	24.3	58.6	18.8	29.9	23.7
Utah	20.8	46.1	27.0	76.9	24.2	26.8	27.6
Vermont	− 0.7	23.4	5.7	39.9	− 0.2	0.6	4.1
Virginia	8.0	35.7	15.2	52.7	15.4	17.3	17.4
Washington	24.3	58.6	32.9	53.4	10.6	17.2	19.4
West Virginia	−24.3	− 1.0	−18.0	8.2	−10.8	2.0	−11.3
Wisconsin	18.1	37.5	22.9	54.1	8.8	19.7	17.0
Wyoming	15.9	40.5	21.9	22.9	10.4	31.2	16.6

50 YEARS OF POPULATION GROWTH–1920-1970



NEA Research Division

adults of working age, the majority will find that the increases in the school-age group will be greater than the increases in the number of workers. Exceptions are Arizona, Georgia, Hawaii, New Mexico, North Carolina, South Carolina, and Tennessee.

College-Age Population

In 1970, the college-age group (18-21) is expected to be more than half again as large as it was in 1960, with every state having an increase. In four states this group is expected to double: Nevada, Arizona, California, and Florida. At the other end of the scale will be West Virginia with an increase of only 8 percent.

More Old Persons, Too

The number of persons 65 years old and older is expected to increase only a little faster than the population as a whole (21 percent vs. 19 percent). Florida, however, is expected to have 74 percent more elderly persons in 1970 than in 1960. Arizona and Alaska will also have substantial increases—61 percent and 49 percent, respectively. Most states will find that the 65-and-over group will increase faster than the worker group, and in some states, faster than the population as a whole. Six states—Iowa, Mississippi, Nebraska, North Dakota, South Dakota, West Virginia—and the District of Columbia will find not only that the 65-and-over group is increasing faster than the total population, but also that the worker group is decreasing.

For details, see: National Education Association, Research Division, Special Project on Financing Education in the 1960's. *Population Projections, 1960-1970.* Washington, D. C.: the Association, June 1961. 12 p. 50¢.

Group Insurance Programs for Teachers

Group health and medical insurance premiums are paid for, at least in part, by more than one-fifth of the school districts of 30,000 or more population.

PARTICIPATION OF EMPLOYERS in paying the costs of hospitalization and life insurance protection for employees is a growing practice in business and industry. It is not surprising, therefore, that such programs are becoming more generally accepted as part of a reasonable program of nonwage benefits for teachers.

In November 1960, the NEA Research Division sent a post-card questionnaire to 724 urban school districts of 30,000 or more population to find out how many pay part of the premiums for employee insurance programs. Replies were received from 621 or 86 percent of the districts.

Group Health and Medical Insurance

The survey showed that of several types of insurance, group health and medical insurance premiums are most frequently paid for in part by the school district—by 22 percent for professional employees and by 23 percent for classified employees. Proportionately more of the larger urban districts than of the smaller districts pay part of the premium.

Group Life Insurance

Group life insurance premiums are partly paid for professional persons by 16 percent of the reporting districts; for classified employees, by 14 percent. Again relatively more of the larger districts than the smaller ones pay part of the premium. A few districts pay the entire premium.

Income Protection Insurance

Only 10 percent of the districts surveyed reported paying part of the premium for income protection insurance. Many districts have Workman's Compensation insurance for their employees, especially those engaged in maintenance work. One school district carries it for the industrial arts teachers.

Workman's Compensation or some similar type of insurance that assures income protection in case of on-the-job accidents is mandatory in some states. Classified employees are sometimes

union members, and this protection may be required by the union.

Many districts reported having liberal sick leave policies which they believe protect the employee's income in case of illness.

Five-Year Change

In 1955-56, as part of a survey of teacher personnel practices in urban school districts, the NEA Research Division found that 4 percent of the districts shared the cost of accident insurance and 18 percent paid the entire premium; for health insurance, comparable figures were 3 and 1 percent; for hospitalization, 4 and 1 percent; for surgical insurance, 3 and 1 percent; for life insurance, 6 and 2 percent. Below is a comparison of the percentage of large school districts which paid all or part of the group insurance premiums in 1955-56 and in 1960-61:

	Districts by population		
	Group I— 500,000 and over	Group II— 100,000-499,000	Group III— 30,000-99,999
Group life			
1955-56	18%	11%	11%
1960-61	24	16	16
Health and medical			
1955-56			
Health	18	2	4
Hospitalization	18	3	7
Surgical	12	3	5
1960-61			
Health and medical	28	22	21

It is not possible to compare directly the percent of school districts paying part of the premium for health and medical insurance, as the earlier study divided this category into health, hospitalization, and surgical insurance. Some districts undoubtedly paid for more than one type; therefore, there is an overlap in the figures and they cannot be added. However, if one allows for disparities in the method of reporting, it is fairly obvious from the figures given above that more districts are paying a share of the costs of health and medical insurance in 1960-61 than in 1955-56, particularly in Groups II and III, the districts with populations of 30,000 to 500,000.

Outlook

When answering the 1960 survey, some school districts indicated that they are presently considering increasing their nonwage benefits by making employer contributions to group insurance programs. Some state education associations have developed group insurance plans for their members which may or may not include employer contributions. At least the individual school boards may aid in administration by collecting the premiums through payroll deductions.

Some state associations hold that group insurance should not be sought until teachers' salaries are raised. They believe it is more important to work for higher salaries than for fringe benefits at this time. If their members have spouses who work outside the education field and who have group insurance for themselves (and often a family health insurance plan), there may be no great demand for insurance to be supplied by the school district.

Nevertheless, the labor market for teachers is highly competitive. The school district that gives liberal nonwage benefits, such as paying part of the employees' group insurance premium, may have an advantage in employing and keeping its teachers.

For details, see: National Education Association, Research Division. *School Districts That Pay Part of the Premiums for Certain Insurance Programs Covering School Employees.* Research Memo 1961-23. Washington, D. C.: the Association, June 1961. 13 p.

Some sick leave pay is required in 25 states; 10 working days per year is the requirement in 15 states.

State Sick Leave Provisions

THE GRANTING OF PAID LEAVES of absence to teachers away from their duties because of personal illness or injury is a desirable school personnel practice. Unlike other enterprises, where the work of absent employees usually can be held in abeyance, or temporarily shifted to other permanent staff members, substitutes must be engaged to take over for regular teachers who are out of school. But, as many local school districts have come to recognize, the salutary effect that an established policy of paid sick leave has on the teacher, the pupil, and the school system far outweighs the added cost.

Adoption of sick leave plans by local school boards is by no means always prompted by requirements of state law. In many states, however, legislation sets the minimum amount of paid sick leave to which teachers are entitled.

A survey of statutory provisions dealing with leaves of absence completed by the NEA Research Division in June 1961 shows that the laws of 33 states and the District of Columbia contain references to teachers' sick leave, while in three other states—Alaska, Hawaii, and Maryland—state board of education regulations impose definite leave requirements on local school districts.

The types of state laws and state regulations in effect may be grouped as follows:

• Twenty-five states and the District of Columbia have specific state-wide mandatory provisions for fully paid sick leave for teachers. In addition, New York law requires certain school districts to adopt sick leave regulations with or without pay, but is silent as to other districts; a special provision relates to New York City teachers.

• Tennessee and Virginia appropriate state funds for sick leave plans for teachers. If local school boards elect to share in these funds, they must comply with state board sick leave regulations. The Tennessee statute specifies how many days' sick leave the regulations shall provide; Virginia leaves the amount up to the state board.

• Three other states—Alabama, Mississippi, and Nevada—authorize local school boards in their discretion to adopt sick leave programs. Aside from Mississippi, the statutes spell out the maximum allowable limits. A fourth state, North Carolina, vests the state board with authority to grant teachers up to five days' paid sick leave per school term.

• The Michigan tenure law, subject to local adoption, and the Nebraska tenure law, applicable to Lincoln and Omaha, carry permissive provisions for leaves of absence to teachers for physical and mental disability or sickness.

• Mandatory leave provisions only for teachers ill with tuberculosis prevail in Arizona and Massachusetts.

The number of states that make paid sick leave mandatory continues to grow. Since 1957, four states—Maine, North Dakota, Vermont, and Washing-

1—STATE MANDATORY SICK LEAVE REQUIREMENTS, JUNE 1961

State	Days per year at full pay	Unused days of leave cumulative to:	Local boards expressly authorized to exceed mandatory leave
Alaska[a]	12	60	....
California	10	Indefinitely	X
Connecticut	10	At least 60	X
Delaware	10	120	....
District of Columbia	10	Temporary teachers, 20; probationary and permanent teachers, 75	....
Florida	10	80 in 12th year	....
Georgia	1¼ for each completed school month	Not cumulative	....
Hawaii[a]	18	Indefinitely	....
Idaho	8	32	....
Illinois	10	60	X
Indiana	10 in first year; 7 per year thereafter	90	....
Iowa	5; increases 1 day for each consecutive year of employment to 9	At least 35	X
Kentucky	10	20	X
Louisiana	10	25 in any 3-year period	X
Maine	10	30	....
Maryland[a,b]	10	....	X
New Jersey	At least 10	Indefinitely	X
North Dakota	At least 5	At least 20	....
Ohio	5	....	....
Oklahoma	At discretion of local board	....	....
Oregon	At least 10	100	X
Pennsylvania	10	30	X
Vermont	10	20	....
Washington	10	180	X
West Virginia	5	20	....
Wisconsin	At least 5[c]	At least 30[c]	....

[a] By state board regulation.
[b] Does not apply to Baltimore City which sets its own sick leave policy.
[c] State aid shall not be paid to any districts, except first-class districts, for any year in which teachers' contracts do not so provide.

ton—have adopted this type of legislation on a state-wide basis. Eleven other states have amended their laws in the past few years to provide more generous sick leave benefits.

State provisions vary considerably as to the amounts of sick leave prescribed. Data on the number of days of mandatory leave at full pay provided by state law or regulations are presented in Table 1. Ten days' fully paid leave per year is most common; 15 states and the District of Columbia require this much.

While a few states provide for leave on an annual basis with no carryover indicated, the more typical provision calls for accumulation of unused sick leave from year to year, up to a specified total amount. One of the more generous in this respect is Washington, where unused sick leave is cumulative to 180 days, the equivalent of a full school year. California, Hawaii, and New Jersey go even further and permit indefinite accumulation. In contrast, unused leave is not cumulative in Georgia, while Kentucky, Vermont, and West Virginia allow only 20 days of accumulated leave.

As Table 1 shows, local school boards in 11 states are specifically permitted to extend the yearly and cumulative limits beyond those fixed by statute or regulation. The laws in other states contain no express authority to exceed the number of days specified. But the statutory language in some of these states implies that local boards may grant more sick leave than the law provides.

For details: see National Education Association, Research Division. *School Law Summaries: Leaves of Absence.* Washington, D. C.: the Association, June 1961. 22 p. 50¢.

NEA RESEARCH BULLETIN

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